

**WHAT IS CLAIMED IS:**

1. A pesticide formulation comprising at least one vegetable oil, at least one surfactant, and azadirachtin, wherein said formulation is storage stable.
2. A pesticide formulation comprising at least one vegetable oil, at least one non-ionic surfactant, and azadirachtin, wherein said formulation is storage stable and contains substantially no water.
3. A storage stable pesticide formulation comprising at least one vegetable oil, at least one non-ionic surfactant, and a neem seed extract, wherein said neem seed extract comprises azadirachtin.
- 10 4. The formulation of claim 3, wherein said vegetable oil is sesame seed oil.
5. The formulation of claim 3, wherein said vegetable oil contains less than 1% by weight free fatty acid based on the weight of the vegetable oil.
6. The formulation of claim 3, wherein said azadirachtin is present in said formulation in an amount of from about 0.1 to about 5.0 weight %.
- 15 7. The formulation of claim 3, wherein said azadirachtin is present in said formulation in an amount of from about 0.1 to about 1.0 weight %.
8. The formulation of claim 3, wherein said azadirachtin is azadirachtin A, azadirachtin B, or both.
9. The formulation of claim 3, wherein said formulation is storage stable such that at least 90% by weight of the azadirachtin originally present remains after 1 year of storage at 25°C in a sealed container.
10. The formulation of claim 3, wherein said formulation comprises:  
from about 1% to about 60% by weight of vegetable oil.  
from about 1% to about 5% by weight azadirachtin;  
and from about 20% to about 55% by weight of said non-ionic surfactant.
- 25 11. The formulation of claim 10, wherein said surfactant is a sorbitan polyoxyethylene trioleate.
12. The formulation of claim 10, wherein said vegetable oil is sesame seed oil.
13. ~~The formulation of claim 10, wherein said formulation contains substantially no water.~~
14. A storage stable pesticide formulation formed by mixing at least one vegetable oil, at least one non-ionic surfactant, and at least one neem extract together to form said formulation, wherein said neem extract comprises at least azadirachtin.
15. The formulation of claim 14, wherein said at least one vegetable oil is sesame seed oil.
16. The formulation of claim 15, wherein said non-ionic surfactant is sorbitan polyoxyethylene trioleate.

17. The formulation of claim 1, wherein said formulation is substantially free of organic solvents.
18. The formulation of claim 10, wherein said formulation is substantially free of organic solvents.
19. The formulation of claim 14, wherein said formulation is substantially free of organic solvents.
20. The formulation of claim 1, wherein said formulation is diluted with water for application.
21. The formulation of claim 2, wherein said formulation is diluted with water for application.
22. The formulation of claim 10, wherein said formulation is diluted with water for application.
23. The formulation of claim 10, wherein said vegetable oil is present in an amount of from about 20 weight % to about 50 weight %; and  
said surfactant is present in an amount of from about 40 weight % to about 50 weight %.
24. The formulation of claim 23, wherein said vegetable oil is sesame seed oil.